

## LPDES PERMIT NO. LA0007561, AI No. 1338

LPDES FACT SHEET and RATIONALE  
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM  
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. **Company/Facility Name:** International Paper Company  
Louisiana Mill  
Post Office Box 312  
Bastrop, Louisiana 71221
- II. **Issuing Office:** Louisiana Department of Environmental Quality  
(LDEQ)  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313
- III. **Prepared By:** Sonja Loyd  
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Water Permits Division  
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**Date Prepared:** January 7, 2009

IV. **Permit Action/Status:**A. **Reason For Permit Action:**

Proposed reissuance of an expired Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301, 4901, and 4903.

- B. **LPDES permit** - Individual LPDES permit  
Effective date: January 1, 2003  
Minor Modification date: November 1, 2003  
Expiration date: December 31, 2007

LAR05M362 (MSGP - Re-authorization)  
Effective date: May 1, 2006  
Issuance date: May 23, 2006  
Expiration date: April 30, 2011

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- C. Application received on December 28, 2007. Application Addenda received on January 30, 2009 and May 4, 2009. Additional information received via e-mail correspondence on April 28, 2009 and by telephone on June 11, 2009.

V. Facility Information:

- A. Location - 705 Colliers Lane in Bastrop, Morehouse Parish (Latitude 32°46'53", Longitude 91°54'30").
- B. Applicant Activity - The permittee is a former integrated bleach kraft pulp and paper mill.

[NOTE: On December 12, 2008, the permittee announced the permanent shutdown of this facility. To date, the permittee is currently undergoing closure of the facility.]

- C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Guideline  
N/A

Reference  
N/A

Other sources of technology based limits:

Current LPDES permit (effective January 1, 2003)  
Best Professional Judgement

- D. Fee Rate -
1. Fee Rating Facility Type: Major
  2. Complexity Type: II - set based on BPJ since the permittee is no longer operating and is currently undergoing closure of the facility.
  3. Wastewater Type: II
  4. SIC codes: formerly 2621, 2611, and 2631

- E. Continuous Facility Effluent Flow - 0.039 MGD (Phase I) and 15 MGD (Phase II)

VI. Receiving Waters: Staulkinghead Creek

1. TSS (15%), mg/L: 10.7
2. Average Hardness, mg/L CaCO<sub>3</sub>: 91
3. Critical Flow, cfs: 1.413
4. Mixing Zone Fraction: 1
5. Harmonic Mean Flow, cfs: 5.15
6. River Basin: Ouachita River, Subsegment Nos. 080912 and 080904
7. Designated Uses:

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Subsegment No. 080912

The designated uses are secondary contact recreation and limited aquatic life and wildlife use.

Subsegment No. 080904

The designated uses are primary contact recreation, secondary contact recreation, and fish and wildlife propagation.

Information based on the following: LAC 33:IX Chapter 11 and Memorandum from Todd Franklin to Sonja Loyd dated April 23, 2008.

VII. Outfall Information:

Outfall 001

- A. Type of wastewater - process wastewater and stormwater runoff
- B. Location - at the point of discharge from the aeration basin prior to combining with the waters in Staulkinghead Creek at Latitude 32°44'10", Longitude 91°58'26".
- C. Treatment - treatment of these wastewaters consists of:
  - primary clarifiers
  - aeration basin
- D. Flow - Continuous, 0.039 MGD (Phase I) and 15 MGD (Phase II)
 

[NOTE: Under the Phase II Conditions, the permittee plans to dewater the aeration stabilization basin (ASB) approximately three (3) times during the term of the permit in preparation for site closure. The permittee anticipates each discharge event to last approximately two (2) weeks.]
- E. Receiving waters - Staulkinghead Creek

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- F. Basin and subsegment - Ouachita River Basin, Subsegment No. 080912

Outfall 101

[NOTE: This outfall requires the permittee to collect samples from Wham Brake under Phases I and II in order to ensure that the ambient water quality standards are achieved downstream of Outfall 001. Discharge from Wham Brake is contingent upon the DO level at the four (4) monitoring locations in Bayou Lafourche.]

- A. Type of wastewater - wastewater from Wham Brake

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- B. Location - at the point of discharge from Wham Brake prior to combining with the waters of Bayou Lafourche at Latitude 32°30'55", Longitude 91°55'50".
- C. Treatment - N/A
- D. Flow - N/A
- E. Receiving waters - Bayou Lafourche
- F. Basin and subsegment - Ouachita River Basin, Subsegment No. 080904

VIII. Proposed Permit Limits:

Summary of Proposed Changes From the Current LPDES Permit:

- A. The complexity designation will be changed from "III" to "II" since the permittee is no longer operating and is currently undergoing closure of the facility.

B. Outfall 001

Two (2) sets of limits for BOD<sub>5</sub> and TSS will be established in the draft permit for the Phase I (when not dewatering the ASB) and Phase II (when dewatering the ASB) closure activities. Under Phase I, the permittee will be required to comply with a monthly average and daily maximum concentration limit for both parameters derived through back calculating using the mass limits and flow rate from the current permit. The establishment of concentration limits under this phase were deemed appropriate since the permittee is undergoing closure of this facility and has had a significant reduction in flow (approximately 20 MGD to less than 1 MGD) from the ASB into Wham Brake. As the closure process continues, the flow rate is expected to reach below 0.5 MGD with periods where no discharge may occur. Under Phase II, the permittee will be required to comply with the monthly average and daily maximum mass limits retained from the current permit. These limits are only applicable during periods when the permittee dewateres the ASB which is anticipated to occur approximately three (3) times during the term of the permit with each discharge event lasting approximately two (2) weeks.

The permittee requested that the monitoring frequency for BOD<sub>5</sub> and TSS be changed from three (3) times per week to twice per month. This Office has decided to grant this request for these parameters under Phase I (with the exception of TCDD); however, under Phase II, the monitoring frequency of three (3) times per week for these parameters will be retained from the current permit. The monitoring frequency reduction for these parameters under Phase I is based on the current status of the facility, DMR data indicating that there

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have been no effluent violations within the past five (5) years, and BPJ. The monitoring frequency for these parameters under Phase II will be retained from the current permit in an effort to ensure that there will be no adverse impact to the receiving stream as a result of the dewatering activities.

2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD or Dioxin) is a parameter that monitors the affect of bleaching wood pulps. The permittee requested that the water quality-based limits for TCDD be removed from the draft permit since the bleaching operation has been discontinued. However, since the Dioxin TMDL for Tisdale Brake, Staulkinghead Creek, Little Bayou Beouf, Wham Brake, and Bayou Lafourche was finalized (June 13, 2002) and included limits comparable to the those established in the current permit (after rounding), this Office has decided to retain the limits in the draft permit. Therefore, the limits and monitoring requirements for this pollutant will not be removed from the draft permit. Under Phase I, the monitoring frequency will be changed from once per six months to once per year based on the current status of the facility and DMR data indicating that there have been no effluent violations within the past five (5) years. Under Phase II, the monitoring frequency will be established at once per week since the permittee will only be discharging under this phase for two (2) weeks per discharge event.

Adsorbable Organic Halides (AOX) is a parameter that monitors the affect of bleaching wood pulps. The permittee requested that AOX be removed from the draft permit since the bleaching operation has been discontinued. Therefore, the limits and monitoring requirements for AOX will be removed from the draft permit since the permittee has ceased all discharges from its bleach plants.

The Whole Effluent Toxicity (WET) testing dilution series for this outfall will be changed to reflect the following:

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Phase I - Freshwater Acute biomonitoring [17%, 23%, 31%, 41%, and 55% (with 41% defined as the critical biomonitoring dilution)].

Phase II - Freshwater Chronic biomonitoring [30%, 40%, 53%, 71%, and 94% (with 94% defined as the critical biomonitoring dilution)].

These revisions are based on recommendations from the Technical Support Section in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. The proposed biomonitoring requirements were developed in accordance with U.S. Environmental Protection Agency, Region 6 (USEPA) policy and biomonitoring protocol which is being established in all major permits as a part of the permit reissuance process. Updated Part II Conditions for the biomonitoring

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requirements will be established in the draft permit. See Appendix B for the Biomonitoring Recommendations.

The permittee requested that the monitoring frequency for WET testing be changed to reflect once per year. The proposed biomonitoring requirements were developed in accordance with USEPA Region 6 policy and biomonitoring protocol which have been established in all major permits as a part of the permit reissuance process. Therefore, under Phase I, the biomonitoring frequency will be once per quarter in keeping with the standard practices of this Office. Under Phase II, the biomonitoring frequency will be once per discharge event. See Appendix B for the Biomonitoring Recommendations.

A provision will be included in Part II of the draft permit which requires the permittee to notify the LDEQ in writing 30 days prior to discharging under the Phase II conditions and 7 days prior to returning to the discharge conditions under Phase I.

C. Outfall 101

This outfall was previously established in the permit to monitor the permittee's discharges to ensure that the ambient water quality standards were being achieved downstream of Outfall 001. However, as a result of the permittee's closure of its facility and a significant reduction in flow from the permittee's aeration stabilization basin into Wham Brake, the permittee requested that this outfall be removed from the draft permit along with the requirement to perform instream monitoring at three of the four monitoring locations (Highway 15, Highway 847, and Highway 133) in Bayou Lafourche. On April 28, 2009, the permittee notified this Office that the U.S. Fish and Wildlife Service (FWS) has been contacted about the future of Wham Brake and is interested in obtaining custodial rights to the brake. However, until this arrangement is finalized, the monitoring requirements at this outfall along with the Wham Brake discharge restrictions will be retained in the draft permit. Therefore, at this time, this Office has decided to deny this request pending the receipt and review of the terms and conditions of the finalized agreement by the FWS.

The permittee requested that a provision be added in the draft permit which allows suspension of the requirement to comply with a minimum DO of 5 mg/L at the four (4) monitoring locations prior to emergency discharge from Wham Brake. This provision was requested to avoid overflowing and creating integrity damage to the brake levee when the level in the brake is within one (1) foot of overflowing the emergency spillway without being limited by the flow condition or the DO level of the receiving stream (Bayou Lafourche). This Office has decided to grant this request. See Part II.H of the draft permit.

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The monitoring frequency for BOD<sub>5</sub>, TSS, DO, and Temperature will be changed to reflect twice per month for all of the parameters under Phase I since the permittee ceased its operations which has resulted in a significant reduction in flow to Wham Brake. However, under Phase II, the monitoring frequency for these parameters will be retained from the current permit since the permittee will only be discharging under this phase for two (2) weeks per discharge event. In addition, the monitoring requirements for the parameters required to be monitored under the Wham Brake Discharge Restrictions in Part II.H will be changed to correspond with the discharge conditions established for each phase. Under Phase I, the monitoring frequency will be changed to twice per month for all of the parameters. Under Phase II, the monitoring frequencies will be consistent with the current permit.

A provision will be included in Part II of the draft permit which requires the permittee to notify the LDEQ in writing 30 days prior to discharging under Phase II conditions and 7 days prior to returning to the discharge conditions under Phase I.

D. Internal Outfall 202

The permittee requested that this internal outfall be removed from the draft permit. This internal outfall previously discharged process wastewater from the A-Line Bleach Plant. Discharges from this bleach plant have been eliminated as of November 7, 2008. Therefore, this internal outfall will be removed from the draft permit.

E. Internal Outfall 203

The permittee requested that this internal outfall be removed from the draft permit. This internal outfall previously discharged process wastewater from the B-Line Bleach Plant. Discharges from this bleach plant have been eliminated as of November 7, 2008. Therefore, this internal outfall will be removed from the draft permit.

F. The provision requiring the permittee to implement Best Management Practices (BMPs) in the Part II Conditions of the current permit will be removed from the draft permit based on the status of the facility's operations.

G. The facility discharges to a Water Quality Act 303(d) stream. Therefore, a reopener clause will be added to Part II of the draft permit in the event that the permit requires reassessment regarding 303(d) status resulting in incorporation of the results of any modifications to the Total Maximum Daily Load (TMDL) Summary for the receiving waterbody.

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- H. The provision in the Part II conditions that required submittal of DMRs to the appropriate Regional Office has been removed from the draft permit. All DMRs sent to the Office of Environmental Compliance/Permit Compliance Unit are scanned into the Electronic Document Management System (EDMS) which is accessible to all LDEQ personnel.
- I. A provision will be added to the Part II conditions in the draft permit which requires the permittee to submit a formal closure plan demonstrating that the closure activities have been completed and that all potentially contaminated wastewaters discharging to state waters have been eliminated prior to requesting that the LPDES permit be terminated. Upon receipt and approval of this plan, the permittee may terminate its LPDES individual permit.

IX. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS, CONDITIONS, AND MONITORING REQUIREMENTS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for types of wastewaters. See outfall information descriptions for associated outfall(s) in Section VII. Regulations also require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX.2715/40 CFR 122.48(b)] and to assure compliance with permit limitations [LAC 33:IX.2707.I./40 CFR 122.44(I)].



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1. Outfall 001 - process wastewater and stormwater runoff

International Paper Company, Louisiana Mill was subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines cited at 40 CFR 430, Subparts B and C. However, due to a change in the status of the permittee's operations, these guidelines are no longer applicable.

Manufacturing Operation

N/A

Guideline

N/A

Two phases will be established in the draft permit based on the permittee's closure activities. Phase I will apply to the discharges from the facility when the ASB is not being dewatered. Phase II will apply to the discharges from the facility when the ASB is being dewatered.

These discharges shall receive the following limits and monitoring requirements:

Phase I

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY (*1)
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	Continuous
pH (Standard Units)	---	---	6.0 (Min)	9.0 (Max)	2/month
BOD <sub>5</sub>	---	---	50	81	2/month
TSS	---	---	87	154	2/month
TCDD	0.077 mg/day	0.18 mg/day	0.82 pg/L	1.9 pg/L	1/year
DO (November - April)	---	---	3 (Min)	Report (Max)	2/month
DO (May - October)	---	---	2 (Min)	Report (Max)	2/month

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PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY (*1)
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Biomonitoring	---	---	See Section D	See Section D	1/quarter

(\*1) When discharging. [Note: The permittee indicated that this outfall may have periods of "no flow" during the term of the permit.]

Phase II

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY (*1)
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	Continuous
pH (Standard Units)	---	---	6.0 (Min)	9.0 (Max)	1/day
BOD <sub>5</sub>	10,392	16,807	---	---	3/week
TSS	18,000	31,947	---	---	3/week
TCDD	0.077 mg/day	0.18 mg/day	0.82 pg/L	1.9 pg/L	1/week
DO (November - April)	---	---	3 (Min)	Report (Max)	1/week
DO (May - October)	---	---	2 (Min)	Report (Max)	1/week
Biomonitoring	---	---	See Section D	See Section D	1/discharge event

(\*1) When discharging.

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Site-Specific Consideration(s)

Flow - monitoring requirements are established in accordance with LAC 33:IX.2707.I.1.b. These requirements are consistent with the current permit.

BOD<sub>5</sub> and TSS - On March 25, 2009, a meeting was held between this Office and the permittee. During the meeting, discussions were held related to the course of action to be taken with reference to the establishment of limits for this facility due to the status of the permittee's operations. As a result, the permittee was advised to compile and submit data for the period of January 2009 to present including information that would serve to justify BPJ concentration limits. On May 4, 2009, this Office received the requested information (dated April 27, 2009) during which the permittee expressed concern related to using the data because of "the uncertainty in the dynamics of the pond dewatering process" and "the limited data collected since discontinuing manufacturing operations at the Mill to establish concentration-based limitations would likely place it in jeopardy of violating its permit as closure activities progress". Therefore, the permittee requested to retain the mass limits from the current permit for these pollutants.

However, on June 9, 2009, Northeast Regional Office (NERO) staff was contacted and informed of the changes proposed by the permittee. NERO staff expressed concern regarding the permittee's diminishing flows having the potential to discharge effluent with high BOD<sub>5</sub> and TSS concentrations if the mass loading limits were retained in the draft permit. Therefore, after discussions with Water Permits Division staff and a conversation with Maurice Marquis (International Paper), a decision was made to establish two (2) sets of limits for BOD<sub>5</sub> and TSS in the draft permit. Phase I will apply to the discharges from the facility when the ASB is not being dewatered. Phase II will apply to the discharges from the facility when the ASB is being dewatered. Under Phase I, the permittee will be required to comply with a monthly average and daily maximum concentration limit for both parameters derived by BPJ through back calculating using the mass limits and flow rate from the current permit.

Monthly Average BOD<sub>5</sub> Limit:

$10,392 \text{ lbs/day} / (8.34 \text{ L-lbs/Mg-mg} \times 24.83 \text{ MGD}) = 50 \text{ mg/L}$

Daily Maximum BOD<sub>5</sub> Limit:

$16,807 \text{ lbs/day} / (8.34 \text{ L-lbs/Mg-mg} \times 24.83 \text{ MGD}) = 81 \text{ mg/L}$

Monthly Average TSS Limit:

$18,000 \text{ lbs/day} / (8.34 \text{ L-lbs/Mg-mg} \times 24.83 \text{ MGD}) = 87 \text{ mg/L}$

Daily Maximum TSS Limit:

$31,947 \text{ lbs/day} / (8.34 \text{ L-lbs/Mg-mg} \times 24.83 \text{ MGD}) = 154 \text{ mg/L}$

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The establishment of concentration limits under this phase were deemed appropriate since the permittee is undergoing closure of this facility and has had a significant reduction in flow (from approximately 20 MGD to less than 1 MGD) from the ASB into Wham Brake. As the closure process continues, the flow rate is expected to reach below 0.5 MGD with periods where no discharge may occur. Under Phase II, the permittee will be required to comply with the monthly average and daily maximum mass limits retained from the current permit. These limits are only applicable during periods when the permittee dewateres the ASB which is anticipated to occur approximately three (3) times during the term of the permit with each discharge event lasting approximately two (2) weeks.

TCDD and DO - limits are based on BPJ using the current permit.

pH - limits are established in accordance with LAC 33:IX.1113.C.1. These requirements are consistent with the current permit.

The permittee was subject to the Best Available Technology Economically Achievable (BAT) for the control of Pentachlorophenol or Trichlorophenol. However, limits and monitoring requirements for Pentachlorophenol and Trichlorophenol have not been established in this draft permit based on previous permits certifying that chlorophenolic containing biocides have not been used at the facility and the current status of the permittee's operations.

## 2. Outfall 101 - wastewater from Wham Brake

This outfall requires the permittee to collect samples from Wham Brake under Phases I and II in order to ensure that the ambient water quality standards are achieved downstream of Outfall 001. In addition, the permittee is required to perform instream monitoring under both phases at four (4) monitoring locations in Bayou Lafourche downstream of Wham Brake prior to discharging any waters from the brake. See Part II.H of the draft permit for the Wham Brake Discharge Restriction.

### Phase I

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY (*1)
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	2/month
BOD <sub>5</sub>	---	---	Report	Report	2/month

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PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY (*1)
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
TSS	---	---	Report	Report	2/month
DO	---	---	Report (Min)	Report (Max)	2/month
Temperature	---	---	Report	Report	2/month

(\*1) When discharging.

Phase II

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY (*1)
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	1/day
BOD <sub>5</sub>	---	---	Report	Report	1/week
TSS	---	---	Report	Report	1/week
DO	---	---	Report (Min)	Report (Max)	1/day
Temperature	---	---	Report	Report	1/day

(\*1) When discharging.

Site-Specific Consideration(s)

Flow - monitoring requirements are established in accordance with LAC 33:IX.2707.I.1.b. These requirements are consistent with the current permit.

BOD<sub>5</sub>, TSS, DO, and Temperature - monitoring requirements are based on BPJ using the current permit.

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C. WATER QUALITY-BASED EFFLUENT LIMITATIONS

Technology-based effluent limitations and/or specific analytical results from the permittee's application were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. Calculations, results, and documentation are given in Appendix A.

In accordance with LAC 33:IX.2707.D.1/40 CFR § 122.44(d)(1), the existing (or potential) discharge (s) was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendix A.

The following pollutants received water quality based effluent limits:

None

Minimum quantification levels (MQLs) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. They are also listed in Part II of the permit.

**TMDL Waterbodies**

Subsegment Nos. 080912 and 080904 of the Ouachita River Basin were not listed on the 2006 Final Integrated 303(d) List of impairments since the *Dioxin TMDL for Tisdale Brake, Staulkinghead Creek, Little Bayou Beouf, Wham Brake, and Bayou Lafourche* was finalized on June 13, 2002. According to the TMDL report, this permittee received the following limit for TCDD:

PARAMETER	MONTHLY AVERAGE LIMIT (mg/day)
Dioxin	0.0802

Based on the current permit, the monthly average limit of 0.077 mg/day previously established for this pollutant is comparable to the limit established in the TMDL (after rounding). Therefore, the current limits for this pollutant will be retained in the draft permit.

Subsegment No. 080904 of the Ouachita River Basin is not listed on the 2006 Final Integrated 303(d) List as being impaired due to the completion of the TMDL Assessments for the following pollutants:

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Organic enrichment/low DO and Nutrients

The Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients were finalized on June 13, 2002. This permittee was not listed as a point source discharger in these TMDLs. However, since the permittee's discharges previously dominated the flow in Staulkinghead Creek, reporting requirements were placed at Outfall 101 in the current permit. Therefore, since the permittee's request to retain the BOD<sub>5</sub> and DO limits at Outfall 001 have been granted, this Office has decided to retain the reporting requirements and related provisions associated with Outfall 101 until an arrangement is finalized regarding the future of Wham Brake.

In regard to Nutrients, LDEQ issued a declaratory ruling on April 29, 1996, which stated: "That DO directly correlates with overall nutrient impact is a well-established biological and ecological principle. Thus, when the LDEQ maintains and protects DO, the LDEQ is in effect also limiting and controlling nutrient concentrations and impacts". For these TMDLs, "the nutrient loading required to maintain the DO standard is the nutrient TMDL". See Section B of the Fact Sheet for additional information.

Suspended Solids/Turbidity

As per the TMDL for TSS, Turbidity, and Siltation for the 13 Subsegments in the Ouachita River Basin (finalized June 13, 2002), point sources do not represent a significant source of TSS. However, since the permittee's discharges previously dominated the flow in Staulkinghead Creek, reporting requirements were placed at Outfall 101 in the current permit. Therefore, since the permittee's request to retain the TSS limits at Outfall 001 has been granted, this Office has decided to retain the reporting requirements and related provisions associated with Outfall 101 until an arrangement is finalized regarding the future of Wham Brake. See Section B of the Fact Sheet for additional information.

A reopener clause has been placed in Part II of the draft permit to allow for more stringent or additional limits or requirements to be placed in the permit, if needed, as a result of any modifications to the TMDL.

D. Biomonitoring Requirements

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols. See Appendix B for the Biomonitoring Recommendations.

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Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall(s) 001 are as follows:

Phase I

TOXICITY TESTS

FREQUENCY

Acute static renewal 48-hour  
definitive toxicity test  
using Daphnia pulex

1/quarter

Acute static renewal 48-hour  
definitive toxicity test  
using fathead minnow (Pimephales  
promelas)

1/quarter

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Phase II

TOXICITY TESTS

FREQUENCY

Chronic static renewal 7-day  
survival and reproduction test  
using Ceriodaphnia dubia  
[Method 1002.0]

1/discharge event

Chronic static renewal 7-day  
larval survival and growth test  
using fathead minnow (Pimephales  
promelas) [Method 1000.0]

1/discharge event



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Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001, March 1989." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to the Office of Environmental Compliance. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Dilution Series

The permit requires toxicity testing under the Phase I and II conditions. The dilution series for each phase will consist of five (5) dilutions in addition to the control (0% effluent) which will be used in the toxicity tests. Under Phase I, the effluent concentrations shall be 17%, 23%, 31%, 41%, and 55%. The low-flow effluent concentration (critical biomonitoring dilution) is defined as 41% effluent. Under Phase II, the effluent concentrations shall be 30%, 40%, 53%, 71%, and 94%. The low-flow effluent concentration (critical biomonitoring dilution) is defined as 94% effluent.

X. Compliance History/DMR Review:

- A. LDEQ records were reviewed for the period of April 2007 through April 2009. No water enforcement actions were issued during this time period.
- B. A DMR review of the monitoring reports for the period of April 2007 through April 2009 revealed that there were no effluent violations.

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- C. The most recent inspection was performed on February 27, 2009. During the course of the inspection, the inspector noted the occurrence of several unauthorized discharges. However, after a review of the unauthorized discharge reports, it was determined that these incidents were adequately addressed by the Surveillance Division and/or the permittee and that no additional requirements need to be included in the permit.

**XI. Endangered Species:**

The receiving waterbodies, Subsegment Nos. 080912 and 080904 of the Ouachita River Basin are not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

**XII. Historic Sites:**

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

**XIII. Tentative Determination:**

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On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

**XIV. Variances:**

No requests for variances have been received by this Office.

**XV. Public Notices:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues

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involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List